THE VETERINARY RECORD

A Weekly Journal for the Profession.

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Veterinarian or Butcher.

The selection of a member of either of these callings for a certain purpose should, of course, be regulated entirely by the work required. If the requirement be the selection of qualities of meat, the slaughtering of animals, or the recognition of neatness in cutting up joints, we should say the butcher is the proper man. If the requirement be the recognition of disease in dead animals the veterinarian is, without doubt, the person to select. Meat inspection as now carried out in most markets is more or less of a farce, but it is only when reports of prosecutions appear in the papers that the ratepayers are able to see the utter ignorance appertaining to the men appointed to protect the public health. So long, perhaps, as putridity was deemed the only cause for the seizure of meat, so long might authorities be excused for appointing men capable of recognising that condition. We have got beyond that primitive stage of knowledge now, and quite a number of abnormal states are held to render meat unfit for human consumption.

Manchester is one of the most enlightened and progressive cities in the kingdom, and we look to its Corporation to set the example for London and other backward places to follow. It was with surprise then we noticed in the report of a meeting of the City Council that a Committee had recommended the appointment of a butcher as assistant meat inspector. The following is the report:—

Councillor Locke called attention to a minute in the proceedings of the Markets Committee that an additional meat inspector, who shall be a butcher, be appointed at a salary of £150 per annum. He pointed out that this proposal was in direct opposition to a recommendation of the sub-committee, who proposed that a veterinary surgeon be appointed as meat inspector at a salary of £200 per annum. He could not understand why a butcher should be appointed to this position, which was of a scientific character. For many years past a butcher had been doing the work, and he ventured to say it had not been a success. It was their duty to the public that a veterinary surgeon should hold the post. One veterinary surgeon had already been appointed, with great success to the Committee, the butchers, and the public. Why was it proposed to revert to the old lines now? He appealed to the common sense of the Council to refer the matter back to the Markets Committee with a recommendation that they should appoint a veterinary inspector to this position, and he moved an amendment to the proceedings accordingly.

Councillor Dr. Simpson seconded the amendment.

Alderman J. F. Roberts, the chairman, said he was perfectly willing to accept the amendment.

The amendment was agreed to, and the minutes of the Committee were confirmed with the exception of the proposed appointment.

The good sense of the Council prevailed, but what would have been the result if the veterinary profession had not been represented on the Council? In Mr. Sam Locke, Manchester possesses a Veterinary Surgeon who recognises his civic duties, and who in return is so valued by his neighbours that they have sent him to represent them on the Council. How much more good might be done for the welfare of a town or a district if Veterinary Surgeons would only recognise their wider duties, and how often might an official position assist the profession to secure work for which they are specially trained and fitted. The *bourgeois* spirit which satisfies its conscience and its greed by the excuse that it is minding its own business, while it is merely neglecting the interests of its fellow men, is a contemptible thing in an individual and a positively disintegrating force in a collective body.

To return to the Manchester City Council. We had a public spirited veterinarian amongst its members, ready and able to assist his profession, and to protect the health and life of his townsmen. We had also a medical man ready to support him, and we trust we shall always meet with the assistance which Dr. Simpson gave to Mr. Locke. When the Medical Profession assists the veterinary in advising a definite course in relation to the food products of animals, or the diseases of stock the advice is certain to prevail. The public are willing to be guided by experts, but they have no guidance when experts are absent, and still less, sometimes—when they are equally divided for and against the subject under consideration.

A Conviction for "Cruelty."

Amongst our correspondence this week is a letter from Mr. Edwin Sayer narrating the facts of a case in which he was fined for "causing to be ill-treated" a lame horse. He asks "can you suggest any means of upsetting such an unjust and foolish verdict." We cannot. The cost of a mandamus is too great to make an application for one worth the attempt. Certainly the case seems a monstrous one if we rightly understand that Mr. Sayer had given no opinion about the horse for a long time prior to the day on which the animal was stopped. The newspaper report of the case, which will be found on another page, hardly gives sufficient of the evidence to show how Mr. Sayer was even connected with the charge. It does, however, say that the solicitor contended that Mr. Sayer was not liable even if he did advise that the mare should be worked, but the magistrates ruled otherwise. This is a very serious ruling, and veterinarians must in self-protection take steps to have it verified. How is it possible that the expression of an opinion that an animal is fit for work can be construed as "causing" it to be worked? The owner is not bound by a professional opinion, and we know of no case in which an opinion renders a man liable to criminal prosecution. It is a legal question which must be settled, and it is to be hoped that the next professional man charged under similar circumstances may be a member of the National Defence Association and thus be able, through the Association, to have the matter settled by a higher court.

The prosecution of a practitioner by the R.S.P.C.A. is no new thing, nor is a magisterial decision in direct conflict with the evidence a novelty. Even supposing Mr. Sayer were liable to prosecution, the evidence given as to the condition of the animal by two veterinary surgeons of repute ought to have been sufficient to secure an acquittal. Apparently the magistrates considered the evidence of the Inspector, supported by a constable and one veterinary surgeon of greater weight than the evidence of two professional witnesses. Verily the ways of the great unpaid are past finding out.

Immediately following the report of this case is an extract from the *Lancet*, which we commend to the notice of our readers.

CASES AND ARTICLES

CONCERNING INFLUENZA.

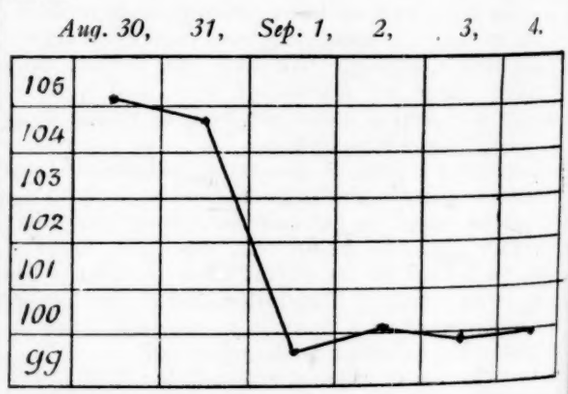
During the past three or four years we have witnessed many outbreaks of influenza which have been accompanied by a considerable death rate, and there have been published numerous records of the characters of the disease generally, and of particular points in connection with individual cases. The opportunity of observing a large outbreak cannot fail to make one reflect on the disease itself and the circumstances connected with it, and the object of this short note is to draw from such an occurrence one or two conclusions which have a practical bearing, and may possibly be of interest to others.

During the months July, August and September, 1891, there occurred, amongst a body of 1300 horses, 600 cases of this, then prevalent disease, the total number of deaths being 4. Of these numbers 276 cases were under the care of the writer, and 2 of the deaths occurred among them.

Here is a point to which it is wished to draw attention, viz., the death rate. At this time (1891) there were many similar outbreaks in the country, the death rate was as a rule high, and it was subsequently noted by others who published on the subject that it bore a direct proportion to the amount of work performed by the studs attacked and to their hygienic surroundings. In the instance now under notice work was practically stopped, and when enforced it had an immediate bearing on the admissions; for instance, from August 6th-20th the average daily admissions were 4; on the 20th 350 horses did a fair day's work, and on that evening and the next morning 20 fresh cases were reported among them, and the daily average remained 13·5 for a week subsequently. It requires no stretch of imagination to calculate the effect of enforced labour under such conditions, and it would appear that if it were possible for the practitioner to have a free hand in the matter of rest and hygiene that the disease would be divested of its most dreaded phases. We know that this is in many cases impossible, but it may be questioned whether the money loss from idleness would not in some cases be amply compensated by the economy of horseflesh.

Another point to be noted is the variation of symptoms which may occur in the same outbreak, but which may be referred to one and the same cause, and it may possibly be questioned whether we have not had some of these described as distinct diseases under divers abstruse names. Speaking again particularly of the instance quoted above, it was noted that the limbs, the intestines and the chest were the chief seats of trouble in individual cases, while in some the conjunctiva bore that remarkakle appearance of bright red injection with œdema, which has originated a popular name it is unnecessary to quote. But in all cases the lesions were referable to the same cause, namely, effusion occurring beneath the skin, in the coats of the intestine, or into the lung tissue, these latter cases being by far the most troublesome. It may be advanced that the lung lesions are truly inflammatory and not due to a simple œdema; careful post-mortem evidence only can decide, and the writer has not had opportunity of making such examinations. Indeed this, viz., the small number of fatal cases, in one argument against the occurrence of a true pneumonia.

The consideration of the temperature charts of the cases cannot be devoid of interest, these were registered daily from the admission until convalescence. They present one great feature in common, and that is the rapid defervescence, of the febrile state, which as a rule was from 4-7 days duration; it was during this rapid decline of the temperature that effusion appeared; and this stage was further marked by a remarkable prostration of the patient. The deviations from these characteristic changes of temperature may be classed under two heads, (i) termination by crisis; (ii) relapses. As regards the first, one very remarkable instance may be quoted; the patient was admitted August 30th, and the accompanying chart will illustrate the course of the case more clearly than words.



Relapses were infrequent, and when occuring took place in cases of an asthenic type. There were 9 readmissions in the 276 cases under note, and in each case the primary attack was an exceptionally mild one. Of the two deaths previously alluded to, one was due to cerebral abscess, accompanied by cardiac dilatation with atrophy, and the other to septicœmia consequent on the prick of a thorn in the muscles of the shoulder.

Lastly, it might be worthy of mention that nursing in all its details was relied on, and medicinal treatment confined to administration of Sulphate of magnesia, occasionally diuretics, and in a few cases alcoholic stimulants.

To summarise, it would seem that when the veterinary surgeon has unlimited control over the stud attacked, especially as regards labour, that he would save his clients a great money loss, which he is otherwise unable to do. The writer would gladly see the opinions of others who have had more extensive opportunities for post-mortem observation, on the exact nature of the lung lesions which are such a troublesome concomitant of this disease.

B.

A CASE OF INTESTINAL OBSTRUCTION.

By J. J. Crowhurst, F.R.C.V.S, Stratford-on-Avon.

The remarkable feature of this case is its duration —eleven days; the longest in my experience.

On January 25th, I was called in by a farmer to see a horse suffering from pain in the abdomen. The animal was a fine cart horse, about 10 years of age and in very good condition. It first showed signs of pain on the afternoon of January 24th, when a colic draught was given him, at 4 o'clock p.m., and another one at 6 o'clock p.m. The owner then came and consulted me about it, and I gave him two Anodyne draughts, each to be given in a pint of linseed oil, one at 9 p.m., and one at 12 p.m.

On January 25th, I visited the horse about 7.30 a.m., he was not in very great pain, pulse 80, I examined per rectum, removing a few fœces and gave an injection. I administered a stimulating draught, left one to be given during the day, and ordered injections to be given every two hours, followed by a little exercise. I called at night and gave another stimulating draught in a pint of linseed oil.

Friday, January 26th, Breathing a little affected, pulse 75, pain not very severe, examined per rectum and found a tight band of gut about a foot and a half from the anus, running from right to left across the rectum, removed two or three portions of fœcal matter. Gave stimulating draught; injections every three hours, and a wine bottle full of linseed tea every two hours. The farmer gave a pint of castor oil at night.

January 27th, breathing better, pulse 99, temperature 104, very little signs of pain, but filling very much with gas, so "tapped" him which afforded great relief. Examined per rectum and found the same tight band but no fœces; ordered injections every four hours with milk. He drank six quarts of linseed tea four times during the day, and had a little exercise.

Sunday, January 28th, pulse 85, temperature 105. Explored rectum, and injected as usual. He drank six quarts of linseed tea four times during the day and was exercised.

Monday, January 29th, did not visit, was informed that the horse took the same quantity of linseed tea; injections and exercise as usual,

Tuesday, January 30th, took same quantity of linseed tea, injections with linseed oil, exercise. Visited at night to tap him again. I did not go again as I did not think the horse would recover, and the owner did not wish to incur any more expense than he could help.

Wednesday, January 31st, took same quantity of linseed tea three times during the day, injections and exercise.

Thursday, February 1st, took same quantity of linseed tea, injections, but no exercise on account of rain.

Friday, February 2nd, same, but with exercise.

Saturday, February 3rd, breathed a bit sharper, refused to drink, showed but very little signs of pain and had not done so from Saturday, January 27th. He had another pint of linseed oil; exercise as usual, but nothing passed during the time; urine alright but high coloured. Found dead on Sunday, February 4th.

Post-mortem made the following day. Great effusion of gas and fluid under the skin. On opening the abdomen I found a dark circumscribed hole, large enough to pass a cricket ball through; in the lower third of the diaphragm, on the left side about six inches from the opening for the œsophagus, with about a foot of ileum through it; also a loop of the ileum twisted round the large colon about one foot from where it joins the small colon. There were four large dung balls on one side of the twist, and the excreta on the other side was very soft, the medicines being detectable amongst it. I noticed a little white spot where I had punctured the gut, it was about a quarter of an inch in diameter. The rest of the intestines were healthy. Heart flabby, left lung dark.

IMPACTION OF COLON WITH SAND.

By A. W. Wood, M.R.C.V.S., Turriff.

I see in your issue of last week a case of above recorded by Mr. Walter Western, M.R.C.V.S., Bracknell.

Last spring I met with a similar case in a three-year-old cart mare, the property of a farmer in this district. When first called to see the mare the symptoms presented were those of impacted colon, the animal refusing all food or water, pawing with fore foot, with uneasy movements, sometimes lying down, but when down lay quietly. The treatment consisted of a ball containing ʒxi. aloes (the usual dose for a horse in this part of the country, the five or six dram balls I was accustomed giving in the North of England would make no impression here) with sedative medicines to dull the pain, with frequent walking exercise until the ball operated, which it did in about 24 hours, bring away a large quantity of fœces, but no sand. When the purging ceased the animal commenced to eat, and looked lively again.

Two days afterwards I was called back to the same patient, and found her presenting the same symptoms as before, bnt greatly aggravated. Similar treatment to the first was adopted but to no avail; no passage of fæces during the time of my second attendance, and the animal died 48 hours after the commencement of the second attack.

The *post-mortem* rather astonished me. I was prepared to find something different from the usual impaction of the colon, seeing the first ball operated well. The external appearance of the bowels presented nothing unusual, but on removing them from the abdomen, I was struck by the enormous weight, and on cutting into the colon I found it contained a large quantity of water-run sand; the amount filled more than two stable water pails. On making enquiries into the history of the animal I found she had been bought in the autumn from a farmer horse dealer, who had bought her the previous spring, and grassed her during the summer on a field adjoining the river Don. This field is over-run with water during a high spate, which carries a quantity of sand along with it and deposits it on the grass. I have no doubt but

that it was while grassing on this field that the animal had picked up the sand with her food, which had accumulated in the colon.

It is rather singular that the animal should have showed no inconvenience during the winter months from such an accumulation of sand, with the exception of slight colicky pains observed by the horseman, but these were only of a few minutes duration. The animal was in the pink of condition at her death.

LACERATION OF PELVIC VISCERA IN MARES.

By E. R. Edwards, M.R.C.V.S., Barton-under-Needwood, Staffordshire.

It is a long cry back to November 12th, 1892, but recollection of a leaderette in your issue of that date on "Rectal Rupture in Mares" and two or three cases subsequently recorded, induces me to place on record the following case.

A five-year-old hunter brood mare was taken on the evening of June 7th, 1893—when in œstrum—to a stud farm, to be served by a thoroughbred horse. The mare was *very quiet and docile*, and her behaviour was such that the veriest novice might have seen that she was in heat; and yet, notwithstanding this, the man in charge of the stallion thought fit to trot and gallop her with a long lunging-rein, in order, so he said, *to quieten* her, which, of course, was under the circumstances a very questionable, nay, a totally unnecessary proceeding. This was continued until the mare was sweating freely; then he put a twitch on her nose, the usual hobbles on her hind legs, and *strapped one fore leg up*. Directly the stallion mounted the mare fell, having only three legs—and two of those hobbled—to stand on; the horse fell with her, and the two animals, according to my information, were "mixed up together on the ground."

About twenty hours after this I was called to the mare, but found her dead on my arrival. The autopsy revealed acute peritonitis, with a laceration three-and-a-half inches in length, of the upper surface of the rectum, slightly to the right of the median line, which had allowed the escape of a considerable quantity of fœces into the abdomen.

All the organs were healthy, and there was no discoloration of the tissues surrounding the injury, nor of the vagina. The laceration was distinctly longitudinal, and *not* triangular, as is often supposed to be the case in these injuries. I am unable to say whether the penis was introduced *per viam naturalem* or *per rectum*.

This case is rather interesting from a legal point of view, for it suggests the query; could the owner of the mare claim the value of her from the owner of the stallion, on the ground of the manifestly improper conduct of his servant in charge of the horse, or would the fact that the owner of the mare was, himself, also on the spot remove any ground of action? *Aliis verbis;* who is legally responsible for accidents which may happen at the time of service?

PHOTOGRAPHY IN DIAGNOSING LAMENESS.

A Suggestion.

We all know how much the camera has done in correcting our ideas as to the true action of the horse in motion on the flat and over obstacles, and I have for a long time theorised that every variety of lameness, according to its situation, degree and cause, must necessarily be distinguished by a particular and exact style of gait, which would be perfectly simple and manifest were our unaided powers of observation and reasoning sufficiently developed to detect them.

This is no new thought; many of our men of light and learning, both in the past and present, have thought likewise, and some have even gone so far as to supply us with the characteristic, diagnostic signs of a goodly number of the many kinds of lameness. Yet I, who in common with many of my *confrères*, in a very snug unopposed practice, consider myself rather above the common "in Lamenesses" frequently fail to find things just as they are represented in books, though of course I never by any chance—at least, hardly ever, make a mistake as to the seat, cause or even treatment of a lame horse. I must admit that sometimes it breaks out in a new place, but I cannot be blamed for that. They all do it.

It is, however, evident that to be a good judge of lameness one should have an accurately seeing eye; assisted perhaps by a good ear, and coupled with a full development of the reasoning faculties. Unfortunately, or perhaps fortunately, the quality of accuracy in these organs of observation and the reasoning powers, frequently in one individual differ very much in their relative values. This it is which so often causes doctors to differ in individual cases; *vide*; any horse case on record. On reflection, I think that at times other causes may have been at work to cause them to differ so very much, but that in no way affects our argument.

One Veterinary Surgeon may have a good and true eye, and indifferent reasoning powers: another these powers reversed, or in any other of the thousand-and-one changes which it is possible to ring on these and other varying degrees of their relative powers: hence it is little wonder if,—starting from so many standpoints as to what they suppose they see, and working the received ideas out with brain organs of very varying powers—they should frequently arrive at conclusions diametrically opposed.

I know your readers will agree with me when I state that I have met many horse lovers who were better judges of whether a horse was lame or not, as well as which leg, than some qualified Veterinary Surgeons, but in most cases the trained anatomist who may at first have failed to detect any lameness will, after it has been pointed out to him, succeed in demonstrating the cause where the other would fail. So even in the simple matter of telling correctly on which leg an animal is going lame it is evident that not only accurate sight but a certain amount of reasoning power is necessary, or if not, when an animal is trotted out, every onlooker with decent eye-

sight would see the same thing and arrive at the same conclusion; but we know they don't, in too many cases. At my old college where the students had separately, without consultation, to whisper their opinion into the ear of our very learned and cute Principal, I believe that it was quite the exception, when many students (more than three) were present, to find a horse which their collective wisdom did not condemn as lame all round.

Now admitting that accurate observation and high reasoning powers are essential to the detection of some beastly types of lameness, I beg to submit that it is likely that the photographic camera with its absolutely true representation of things exposed to it; joined say to the *unanimous* (?) opinion of our experienced Professors in one or all of our colleges; corrected now and again, when possible, by post-mortem examinations, etc., might be productive of a series of pictures, exquisite representations of every known form of lameness; invaluable in the training of pupils and students, and sometiines even to the general practitioner.

My suggestion is that some rich philanthropist, or body of men such as the R.C.V.S. should open and properly equip a ride for the purpose of taking such a series of photographs. As I have pointed out, to be of any real value, each case would have to be authenticated as what it professed to be, from seedy toe to hip joint disease, by the decision of our best authorities and post-mortem examinations. The camera requires no endorsement. I have no doubt but if this were properly carried out we would soon acquire a valuable series of absolutely correct representations of the several varieties of gait in every kind of lameness.

EL BETAAR.

ARE THE GOVERNMENT AND THE PUBLIC TREATING THE VETERINARY PROFESSION FAIRLY?

By TEDBAR HOPKIN, F.R.C.V.S.

At the Annual Meeting of the Lancashire Veterinary Medical Society held on Friday February 9th, expression was given to a very strong feeling as to the way we, as a profession, are being treated by the Government and public. Our profession, as a whole, had, ever since I have known it, been honest and generous in doing all that it could to prevent disease. The public has been educated in hygiene and sanitation until diseases due to these causes have been considerably reduced; whilst in the case of contagious and infectious diseases, if our advice had been followed, they too would not only have been diminished but almost banished.

Any V.S. of twenty years standing will tell you that pleuro-pneumonia contagiosa, foot-and-mouth, glanders, periodic ophthalmia, and many other similar diseases were a fruitful source of revenue to every practitioner, but now no income is derived from these except in cases where the authorities have ignored the advice of the veterinarian, as in the case of glanders in London. Having dealt honourably and sacrificed ourselves for the good of our country, what is the treatment we have received in return?

First, as regards Imperial governments. They have ignored us, on every possible occasion in the administration of the Contagious Diseases (Animals) Act. Policemen have been appointed inspectors, and when they failed travelling inspectors, selected from every walk of life, have been appointed. There are reasons which need not be enumerated why local veterinary surgeons would be at a disadvantage in carrying out the provisions of the Act. Why should not the travelling inspectors be veterinary surgeons? They would then be able to give reliable statistics as to the percentage of other diseases in the slaughtered animals, and would be able to recognise infectious material, and in many ways have the advantage over men without the slightest knowledge of the material, and the laws governing it, with which they have to deal.

If rumours are correct, the powers that be are not showing any anxiety to replace the retiring principal veterinary surgeon to the Board of Agriculture by a competent successor. Is the veterinary department of the Board to be officered by place-seekers, or by able members of the profession who are, by their training and education, well qualified for the duties they have to perform? If we, as a profession stand meekly by, this further insult and wrong will without doubt be perpetrated. Agitation is unpleasant, and we naturally shrink from it, but there are times when unpleasant work becomes a duty, and this is now the case. The question should be brought before every veterinary medical association in the country, discussed, and a memorial sent to the Government and to the minister of the Agricultural Department. The Royal College has discussed the matter, and appointed a committee or deputation, and possibly it will not hesitate to go forward with it if strongly supported by the profession at large.

One thing we lack, and that is a representative in the House of Commons. (I do not for one moment forget the great debt of gratitude our profession owes to Sir Frederick Fitzwygram). We want, instead of so many lawyers in the House, more medical men; and instead of so many directors of public companies, some representatives of our profession and others instructed in the sanitation and food supply of our country.

Second, how has our profession been treated by Muncipal Governments and Local Authorities? Again, I say unjustly. Who so fit to recognise and detect disease in animals slaughtered for human food, and to help to carry out the Contagious Diseases (Animals) Act, as the veterinary surgeon? In our city for many years the inspector was a drunken, incompetent man, originally a butcher; and when it became absolutely necessary to supersede him, had there not been a member of our profession in the city council to fight the battle for us, our profession would again have been ignored.

This is, and has been, the state of affairs all over the country. We are not asking for any favours, but that such important work should be done by men able and qualified to do it in a thorough manner —on scientific lines, not by guess work or chance.

Glanders, the greatest of all those scourges, is dealt with by those inspectors! Now can any but a veterinary surgeon know how to detect or deal with this disease? In human medicine we do not find medical officers of Health selected from butchers, bakers, and candle-stick makers. Why should it be so in ours? Because we have been too apathetic. Let us rouse ourselves, and prove to the world at large that we are competent to do our own work—and do it better than anyone else, and that we have, as stated at the commencement of this paper, acted disinterestedly. It may not be pleasant and in keeping with the finer instincts of a gentleman to insist on our own value, but it is necessary for our self-respect, our professional well-being, and that justice may be done.

THE NATIONAL VETERINARY BENEVOLENT AND MUTUAL DEFENCE SOCIETY.

By Thomas Greaves, Knott Mill.

The unjustifiable animadversions in the Editorial of *The Veterinarian* for 1st February, written by Prof. Macqueen, displays lack of knowledge of fact (on his own statement). It is a reflection upon the above societies, and the method adopted by its officers in conducting its business. Such comment being calculated to mislead the Profession, we feel it to be our bounden duty to make the following statement.

When, Why, and How the Society was Formed.

It was established in 1865, by a deputation of the officers of three or four Vety. Medical Societies, who, after many meetings and much consideration formulated a scheme, and drew up rules, &c. This conference was consequent on a paper read by Mr. Friend, V.S., before the Liverpool Veterinary Medical Association, on "The Liability of Veterinary Surgeons." The committee was composed of earnest, experienced, thoughtful men, who had seen that such a society was greatly required, they had only the best interests of the profession in view. It seems the Professor and others are actually ignorant of the name even of the Society. There is no Manchester V.B. Society, and never was, it is the National V.B. and M.D. Society.

It has ramifications all over England, Ireland, and Scotland. We have ample evidence during nearly 30 years experience that the two societies can work well and satisfactorily conjointly, there has never been the slightest friction from beginning to end, every one who is a well-wisher, every one who is a sincere friend, who desires to assist the Society can do so, and is hereby invited to assist *by becoming members of the Society*, not by showing the bickering spirit exhibited in this editorial—not by trying to tear the Society to pieces and deprecating the success which he has never once raised his little finger to assist.

The Means Taken to Establish it.

When the above Society was first formed a circular setting forth its object and importance was sent to every member of the profession. This method of publishing our Society has been repeated more than a dozen times during these 29 years. The claims and importance of the society have been advocated repeatedly before every Veterinary Medical Association in England, Ireland, and Scotland; we have held our annual meetings in London, Edinburgh, Birmingham, Leeds, Liverpool, Manchester, and other large Towns; our meetings are always published in the journals, and full reports given. These meetings *are always conducted in the light of day*; our Treasurer has travelled more than 2000 miles expressly to proclaim its existence, and has got members from every part of England, Ireland, and in Scotland; every year we have two or more articles in the Journals. So if the Professor Macqueen, is in ignorance, and knows none of the facts, he is to be pitied; *the fault is his own*, and it convicts him of being unacquainted with the contents of his own Journal. I would beg you all to read those articles in *The Veterinarian* for 1864, and especially those for 1890, page 785, 281, 649, 864, and 266, and many others in other years. A motion was put and carried at our last meeting to apply to the four Colleges to be allowed to hang up in each College a board with the name and object of our society, and further to approach the Principal of each College and respectfully request that he will kindly consent to introduce into one or other of his lectures a favourable mention of the object, and importance of our Society. The Editor of *The Veterinary Record* has kindly offered to give us a space for our use once a month. What more could our learned professor Macqueen do to remove the apathy which we all know exists to so great an extent in our profession.

The Financial Statement.

This statement has been made out annually, and printed in the *Veterinarian*, *Veterinary Journal*, and *Veterinary Record*, showing every shilling received and every shilling paid. The accounts have been regularly audited by the appointed auditors, we have dealt with some dozens of cases of Benevolence, and some scores of cases of defence, we have defended cases in London, Leeds, Birmingham, Cardiff, York, Wolverhampton, Liverpool, Manchester, Macclesfield, Knutsford, Rugby, Melton Mowbray, Sheffield, and many other places too numerous to mention with satisfactory results, having been unsuccessful in only one case. Yet in the face of this, this learned Professor asks the audacious question, "what facts in its history occur to us? Emphatically we say it, none." What inferences can be drawn and what influence can be wielded, I would ask, by such pernicious Editorials. Surely men are not so ignorant as they seem, or is it because they never read this *Veterinarian*, or *Veterinary Journal*, or *Veterinary Record*, perhaps they have been up in a balloon, or they may be of the type of Rip Van Winkle! The officers, namely, Mr. Peter Taylor, President, Mr. Sam Loche, Secretary, Mr. G. Morgan, Ex-secretary, and myself Hon Treasurer, with the members of council, have no self-interest to serve; no cost is incurred to the Society for their services, although sometimes they travel hundreds of miles to attend the meetings, or give evidence in court, and

the loss of time, trouble, and expense, is accounted nought if only they can assist any member, his widow, or his orphans who are in trouble. I would say here, more in sorrow than in anger, that although every sensible man knows it is his duty, especially if they have a wife and family, to make due preparation in case of accident, or sudden death, few do this while in health and strength, viz., put themselves in a safe position, or their widows and orphans in the care of those who will care for them. In our experience it is most painful to think of the many applications made for help by those who being proceeded against, or who are in need of help but who have failed to become members, and are thus ineligible to receive help from our funds. It would appear we, the officers have given great offence for doing all the work of the society, but in our case we hear that still, small voice whisper "Well done thou good and faithful servant." This is our reward.

"It is the mind that maketh good or ill,
That maketh wretch or happy, rich or poor.
For some that hath abundance at his will
Hath not enough, but wants in greater store;
And other that hath little asks no more,
But in that little is both rich and wise."

We are satisfied that "nothing succeeds like success." We have now between £3000 and £4000 husbanded and safely invested in charge of legally appointed Trustees, the result of quiet persistent attention, and carefulness; this Benevolent Fund cannot under any conceivable circumstances be used for Defence purposes. We had 15 new members last year and 15 new members the year before, and 11 new members this year.

THE LONDON UNIVERSITY.

By Harold Sessions, M.R.C.V.S., F.H.A.S.

The report of the Royal Commissioners, on the construction and scope of the New University for London, has recently been drawn up and presented to Her Majesty.

The scheme proposes to form one Central University for London, called the "Gresham University," to which will be affiliated various existing teaching schools in London. The governing body of the University is to consist of the Queen as visitor, a Chancellor, elected by convocation; a Vice-chancellor; and a Senate of sixty-five members; and an Academic Council.

The members of the senate to be elected by various learned Institutions, and professions, among them being, the faculties of Art, Science, Medicine, Law, Theology, Music, Royal College Physicians, Royal College Surgeons, Society of Apothecaries, and the Royal Agricultural Society, beside various Institutions and Schools.

Among the whole list there is no sign of the Veterinary Profession being in any way considered or even thought of. Surely we cannot blame the Commissioners for this oversight, but must blame ourselves, and I hope that the Council of the College will use their utmost influence to secure us a position in the New University, before it is too late.

Any action that is taken would come with better grace and with much greater force from the Representatives of the profession than it would from individual members, and if successful, one of the drawbacks to the London Veterinary School would be removed.

Some of us who have taken our diplomas during recent years have felt keen disappointment at being unable to take a University degree conveniently with our Veterinary Diploma, and have made considerable effort to induce the University authorities to accept the Veterinary Diploma as excusing at least some residence, if not to examinations in taking their degree. This was however without avail.

At the present moment this hardship seems capable of being rectified and the status of the profession raised in Academic circles. Will the council utilize this opportunity, or will they waste their time in discussing, "The origin of ethics," or "Professional Etiquette?" A story is told of a certain County Council, that spent three quarters of an hour debating the sort of oil that should be used to lubricate their steam rollers, which immediately afterwards made a vote of £30,000 without any discussion. No doubt the subject of the oil was important, but it was the duty of an official to see about such details, while the council devoted its energy to the larger matter. May not we ask our council to consider the subject of a Veterinary degree, and enable us to take our proper position as Science students, and leave the small indefinable question of "Professional etiquette" to work out its own solution—which it is rapidly doing—especially if aided by the watchful care of the officials of the college?

There is every appearance that in the future duties of the Veterinary Profession a wider and different field of work is opening up, and while we shall keep even in a stronger degree than before the treatment of individual cases, we shall also add, the Sanitary inspection of buildings in which animals are kept; Hygiene and Preventive Medicine; and the Inspection of meat.

But to hold our own in competing for this new work we must show the public as good or better qualifications than members of any other profession who may desire the same work, and a recognised University Degree will certainly aid us.

[The R.C.V.S. is not a teaching institution and might by any action injure itself.—Ed.]

THE PROPOSED VETERINARY COLLEGE FOR IRELAND.

By E. Wallis Hoare, F.R.C.V.S., Cork.

The Editorial remarks on the above subject, which appeared in the *Veterinary Record*, of February 3rd, will be read with satisfaction by most members of the profession in Ireland.

A teaching school established could not possibly be of any detriment to the profession, in fact it would be of advantage in stimulating its teachers to educate the students to as high a standard as possible, but if there be any chance of another diploma-granting

body being formed, then indeed it is a matter of very serious importance.

Even at the present time the evil effects of over competition are being felt in this country, where the supply of practitioners already exceeds the demand, and if the entry to the profession be facilitated by the formation of another examining and diploma granting body, it is clear that the profession will become deteriorated thereby.

It is a strange fact that although Dublin possesses medical schools and examining boards and universities of a very high standard, a large proportion of medical students go over to Edinburgh and other places to obtain their qualifications.

One argument brought forward by the promoters of the Irish Veterinary College, is, that it is a great hardship for Irish students to have to study in either London, Edinburgh, or Glasgow, but from what we know of the medical students as just stated, it would appear that those in the Veterinary line would also leave their own country to study, unless indeed the examinations were made of such a character, as would induce them to remain,

The profession at present, under the new rules of study and examinations, has reached a very high standard of perfection, and anything that would tend to detract from such a state, should be put down with a strong hand. One examining and diploma-granting body is amply sufficient for the United Kingdom, it is the fairest principle, because all students have to undergo a similar examination as to their fitness to practice.

What strikes one as peculiar with reference to the deputation which waited on Mr. Morley, is, that among all the names reported, there does not appear the name of a single Veterinary Surgeon. Perhaps this may be an error—at any rate it contained an ample number of Medical men.

VETERINARY SOCIETIES.

THE CENTRAL VETERINARY MEDICAL SOCIETY.

(*Continued from page* 457.)

Meeting at Red Lion Square on Thursday, February 1st. "Intestinal Calculi in the Horse" by A. L. Butters, M.R.C.V.S.

DISCUSSION.

Mr. ROGERSON thanked Mr. Butters for the very practical way in which he had dealt with the subject. He thought he had said nearly all that was necessary to be said but he (Mr. Rogerson) had just jotted down a few points to which he would briefly allude. First with regard to the frequency of these concretions; he did not think they were sufficiently observant as a rule in making post-mortem examinations, and that many of these calculi were overlooked by them. They all knew how anxious knackers were to get hold of these calculi because they could make a little money out of them by selling them to various individuals who were interested in these things. He had lost no less than ten horses during the last twelve months through the presence of calculi. Mr. Butters' estimate had generally exceeded the weight of those calculi found in his (Mr. Rogerson's) experience. The weight in the cases which had come under his notice was from 2lb. to 3lb.—4lb. at the most. As to the composition of the calculi the preponderance of the prosphates led him to suppose that the concretions were formed in a great measure by the material which the horses got in the way of food, more particularly bran, as that was composed very largely of salts. The situation also, he thought, was very important. Mr. Rogerson pointed out various specimens amongst the collection which he had assisted Mr. Butters in gathering, as the kind of calculi which caused death. Most of the specimens shown were, he said, his. None of the concretions present which he indicated had been formed without a nucleus—either of gravel or granite. In one case a piece of india-rubber formed the nucleus. Mr. Butters had referred to a morbid condition of the intestines in cases of calculi. In this, Mr. Rogerson was inclined to disagree with him. In making post-mortem examinations in these cases he had rarely found any morbid condition of the intestines, and very little inflammation at the seat where they were found. As to temperature, that was, in his experience, very little in excess of the normal. Concerning the duration of the symptoms, he found that they would last from thirty-six to forty-eight hours as a rule. Mr. Butters had mentioned the examination of the rectum. By this method he (Mr. Rogerson) had not yet been able to reach the calculus. He had got a calculus into the floating colon and been unable to pass it any further except a foot or two. Mr. Butters had referred to a very important point in connection with this disease—if he might so call it—and that was the operation of laparotomy. On one occasion he (Mr. Rogerson) ventured to perform that operation. The animal was almost at the point of death before he attempted it. The time was when the animal was lying down in the box. He secured the horse by means of hobbles and administered chloroform, and he made the incision in the region of the flank. He had frequently consulted various practitioners with regard to this operation, and had always been assured that it was impossible; that the moment one made the incision the intestines came out, and that they could not be got back again. That, however, was not his experience. He thought that if they were careful in the operation, careful in making the incision, they could get in their arm and manipulate the interior without any fear of the intestines rushing out. At any rate in this way he found the calculus in the case he referred to. The mare died before he completed the operation. He passed his arm into the abdomen, got hold of the rectum and worked his way up until he came to the calculus which was where he expected to find it.

As to diet, he had a very great objection to the use of bran. It was largely composed of material that went to form these concretions. Nor did he think bran was a very nutritious sort of diet. Alluding to the automatic separator, to which reference had been made by Mr. Butters, Mr. Rogerson considered it a well constructed machine and that all large horse owners should adopt it. It was composed of a magnetised steel plate through which the oats percolated, and which naturally collected the little bits—foreign bodies—contained in the food. He exhibited a specimen of the machine which was not of English manufacture. Having obtained that specimen he was curious to know how the nails produced got mixed with the oats. He made the discovery one day when he chanced to be in the company of an old sea captain, who told him that the nails were used for tacking the canvass round the vessel when oats were about to be shipped, the canvas used to prevent the oats from percolating into the crevices of the ship and getting into the machinery.

Professor PENBERTHY said he had listened to Mr. Butters' remarks on a very important subject with the

pleasure he always experienced in hearing addresses of the kind that were the result of real, practical observation. The subject had been dealt with from the most important point of view, namely, of prevention. He thought they could pretty clearly understand from Mr. Butters that he was not at all certain about the cases in which calculi existed, that they had no means of positively ascertaining when these concretions existed; and that if they could settle the question of their existence by manipulation, he regarded the operation at present as a rather risky one. As far as prevention went he (Professor Penberthy) was entirely with Mr. Butters. As regarded the formation of a calculus and the conditions that favoured it he did not agree with Mr. Butters or with Mr. Rogerson. In the first place he did not think they could have a calculus without a nucleus, either an oat-hair one, or a phosphate one, or a mixed one. Everything must have a beginning and it seemed impossible to him to have a calculus without there being first a nucleus. In the case of an oat-hair calculus it was just possible that the material forming the nucleus was usually of the same nature as that of which the rest was formed. Again a little oat-hair or animal hair became mixed with material containing a large amount of phosphates and they got the formation of a nucleus. He did not think that the feeding of horses with bran favoured very much the formation of calculi. He quite agreed with Mr. Butters that the peculiar condition of the alimentary canal which he described led to the formation of calculus. Professor Penberthy produced a small nucleus which was not yet covered by the calculus. It was, he said, passed by a pony still living which had passed about twenty-three calculi altogether. This pony was one of nine others that had been fed for the last six years on absolutely the same food and the same water, and yet it was the only animal that had shewn the slightest sign of calculus. Although the owner had fed horses in the same way during the last sixty-five years he had never anything indicative of calculus formation before. The habit of the pony was, when it was brought up to the door and its head was loose, to pick up gravel from the walk, and the nucleus produced was a bit of pebble. In order to understand how calculi were formed they must first determine whether the material which was fixed on to the nucleus was a body which was previously soluble or in solution, or was it deposited by chemical change, by an alteration in the chemical reaction or laid in as bran—something taken in as food. He thought bran might increase peristalsis, but that it was altering the chemical constitution of the contents of the intestines which threw down the basic phosphates. Many of the phosphates were soluble. It was some condition special to the intestines which threw out by solution the salts forming the basic phosphate which was insoluble. Having regard to the large number of horses fed with bran and to the small number of calculi found in horses so fed, he did not think the solution of the problem as to the formation of calculi was to be discovered in a bran diet. His theory was that these concretions must either result from the habit of the individual in picking up the nuclei, or from some special condition of the intestines which favoured the deposition of the salt in the peculiar form in which they found it in the calculus. He thought it would be very difficult to feed a horse on bran and produce a calculus with any degree of certainty. Mr. Butters did not mention the immense calculi which had been found without giving rise to any symptoms whatever. He (Prof. Penberthy) knew of calculi—eleven altogether—jointly weighing 37lb., one of which alone weighed 26lb., and yet the possessor of this enormous calculus—the animal—never showed any symptoms of abdominal complaint during its life, and it lived fifteen years, dying eventually of pneumonia. The calculus found only after death, was worn down to the extent of two or three inches, and it included several metallic bodies. In this case he assumed that a pouch existed in the intestines which held the calculus and distended as the calculus grew, yet still allowing room in the intestines for food to pass over, and for the calculus to increase on its upper surface. It was, he thought, this pouch that caused the peculiar conformation of some of the calculi they came across. He did not think that as a rule these calculi went any great length to and fro in the intestines. He agreed with Mr. Butters that they were very probably formed in some certain spot, the chemical re-action of which was peculiar. He did not know that he had any very strong opinion about the symptoms, but his experience certainly pointed to recurrent colic, and so strong was his opinion upon that point that if an owner had a horse which had recurrent attacks of colic, he should advise him that it was likely that calculus would end the animal's life. He was not, however, at all certain about this. It did not follow that because a horse had a calculus it would necessarily die. Mr. Rowe and himself had had a case in point where a horse passed several calculi and yet lived. (Mr. Rowe: "And it has been sold since.") (Laughter.) Well, the principal point that he wished to bring before the meeting as a view of his own was that he considered the condition of the intestine, as the result of some chemical re-action which he could not explain, favoured the formation of calculi. They knew that the great acidity of the stomach in all probability prevented the formation of calculi there. What excited the chemical re-action or change in the intestine he did not attempt to suggest, but he believed the chemical reaction was such as to alter the re-action of the constituents and throw down the lime salts. So in the prevention of calculi as well as in the avoidance of nuclei he should advise all his clients, were he a private practitioner, that their animals must have tonic and alterative medicine very often. (Applause.)

Professor MACQUEEN complimented Mr. Butters on his very excellent paper. A more thoughtful production, he had not, he believed, listened to since he became a member of that Society. With regard to the frequency of intestinal calculi he believed that cases of the kind were not nearly so frequent as they used to be, and he thought that this was largely due to the greater attention which was paid to the preparation of the horses' food. As to the situation of the calculus, his opinion was that it was found in most cases in the colon, and when it moved it was found in the single colon. He had looked back for a good many years in the records of the profession and he had only found one case recorded in English veterinary literature where the calculus was in the cœcum. The French physiologist, Colin, made 900 post-mortem examinations, and in 20 of these he discovered the calculus in the colon and only one in the cœcum. Now, in this country they frequently found a calculus in the floating colon—the small colon, but the probability was that the calculus had been moved from its original position in the double colon. His belief was that the cause of the production of calculus of any form was to be found in the anatomical arrangement of the horse's intestines and the character of the material it took into its stomach. They might first have a depraved appetite or some other form of indigestion causing the animal to take into its stomach material that was not soluble. With regard to the production of phosphates tending to bring about the calculi as the result of the precipitation of salts, he maintained that most substances taken into the stomach contained those salts, and indigestion ensuing on this abnormal material they found in the anatomical arrangement of the colon, conditions favourable to accumulation.

He was of opinion that if there was one food more than another calculated to produce calculi it was bran. In

this contentment he differed entirely from Professor Penberthy, notwithstanding that gentleman's elaborate statements with regard to certain basic phosphates, and phosphates that were not basic. He confessed that he could not follow Professor Penberthy in his organic chemistry on this point. It was a matter of no concern whether the phosphate was basic or not so long as they knew that bran contained a large percentage of them, or so long as they knew that bran was practically indigestible; that it passed almost entirely through a horse, lost some water in the process, but was certainly not digested. Professor Penberthy qualified his conclusions a little by saying that if bran was given in proper quantity it would not be likely to do any harm. He quite agreed with him. As to symptoms he was sorry to say that he had never been able to discover any diagnostic symptoms of calculi. He was of Mr. Butters' opinion that every symptom failed. He agreed with Professor Penberthy when that gentleman said that recurrence of pain was strongly suggestive of intestinal calculus. In many cases within his own knowledge, where the animals were subject to repeated attacks of abdominal pain the presence of calculi was never diagnosed during those attacks, but post-mortem examinations disclosed the existence of concretions. But in those cases there was, nevertheless, a suspicion of calculus, and treatment was directed to bringing about recovery, under the impression that calculus was the cause of the pain. Now the reason why a large calculus, say one of 25 or 30lb., might not show any symptom of its presence was, as had been explained, the fact that it created a pocket for itself. A dilatation of the intestines occurred, and until a calculus was removed or shifted there were no symptoms. He believed that in some cases they actually succeeded in returning the calculus to its original seat—cases where recovery occurred.

His opinion was that all treatment should be directed to keeping the patient as quiet as possible with that end in view. Then as to the duration of symptoms, he had had one case where a horse lived twenty-three days. It did not eat any solid food during that time; but it drank, and received nutritive enemas. The symptoms continued during the whole of the twenty-three days. In referring to veterinary periodicals he found a case reported by Mr. J. Brown, of London, where a horse developed symptoms on the 1st January and lived until the 7th of the next month, showing continuously meanwhile symptoms of abdominal pain. In that case a post-mortem examination revealed a calculus weighing 5lb. in the single colon. In another reported case where a horse with a calculus lived thirty days after developing symptoms, one symptom was noteworthy, and that was that the animal during its entire illness never pawed the litter. Pawing the litter he regarded as a first rate symptom of intestinal calculus. Backing, he believed, was another symptom although that was not sufficiently distinctive. It was not by one symptom that calculus was to be diagnosed but by a collection of symptoms. He was very much in favour of rectal exploration not once, but as often as possible. Some one had said that they would never succeed in relieving an animal of rectal calculus. Well, he had removed calculi from the rectum by repeated exploration and injection with oil, and he did not know any better plan of diagnosis than by passing the hand up the rectum. He had always observed that a horse affected with calculus developed his symptoms slowly, gradually, became uneasy, remained uneasy, and never showed any acute symptoms until death was nearly approaching. As to treatment he agreed with Mr. Butters. It was advisable to look well after and superintend the preparation of the food. There was no doubt that the use of the automatic separator then exhibited was preventing a great many cases of intestinal calculus. In cases which were diagnosed he believed in the operative treatment which had been recommended, and he was glad to hear that Mr. Rogerson had attempted to relieve a case by laparotomy. In 1877 that operation was performed by Felizet, who thus abstracted from the colon of a horse a calculus the size of a child's head. The operation was perfectly successful. Professor Macqueen went on to say that he thought there was great scope for operative procedure in cases of calculus, but a condition precedent to this was that the cases must be first correctly diagnosed. This was their difficulty. Their only hope of real diagnosis was in repeated rectal exploration. If anyone could diagnose calculus it could only be done through the rectum, and the oftener rectal exploration was resorted to the better. As to the bowel coming out, that was of no consequence. They had had in another operation the escape of the bowels. There was nothing to be afraid of on that score. If the bowels would not go back they could puncture them. The main thing was to diagnose a case early, before the patient got worn out. He was determined at the first opportunity when a case of calculus was diagnosed, that he would operate in spite of any other hindrance. (Applause.)

Mr. HURNDALL said one of the great advantages of that society was that they were able to air their various experiences, but it was singular how, after many years practice, some of them differed on points in the way they did. He was rather surprised that from the remarks made by gentlemen of considerable experience in regard to calculi, none of them seemed to have been struck by one symptom. The symptom to which he referred had invariably been present in the cases which had come under his notice. It was the straining of the quarters against the wall. He did not mean to say that they never saw straining under any other circumstances, but straining with this disposition to pressure against the wall had invariably been observed by him on the part of horses ultimately found by post-mortem examination to have calculi. He perfectly agreed with Mr. Butters and subsequent speakers that the recurrence of pain of a very violent character was another symptom of calculus. A horse seemed to have pain coming on and it passed off for a few minutes and then recurred, but they did not see this indication of violent pain in a horse that threw itself about. It lay down, got up, turned round, looked at its side and gave evidence of pain, which appeared to be continuous but which eventually subsided for a short time. He was partly disposed to agree with Professor Penberthy's views that there was a calculous diathesis, a tendency in the mucous membrane to deposit in chemical form an excess of phosphatic constituents which the system did not assimilate. He did not know whether that was putting it exactly as his friend put it, but that was the view which he took.

Professor PENBERTHY:—That is not what I meant to imply.

Mr. HURNDALL said that was his own view of the question, and he thought, too, that bran was essentially an article of diet which was calculated to further that morbid condition; because bran, if he understood its chemical composition aright, contained a preponderance of phosphate. However that might be, they were confronted with the fact that horses fed on large quantities of bran were more often the subjects of calculi than horses which were not fed with bran. Although he agreed with Professor Macqueen that bran was not readily digested, and that it assisted in the formation of calculi without having undergone the process of digestion to any great degree, yet he thought that it was the phosphates that were more readily acted upon, and that had a tendency to deposit around the nucleus. Like Professor Macqueen, he had always made it a rule to make frequent rectal explorations, and it was his

experience that on three or four occasions he had succeeded in removing calculi, some of which were about the size of his fist, he thought. He was surprised to hear Mr. Rogerson say he had never had a similar experience because, as they were aware, in the class of horse with which that gentleman had to deal, calculi were more frequently met with than they were, perhaps, in animals of a lighter character. He would give them an illustration in confirmation of his view that horses fed largely on bran were more subject to calculi than horses otherwise fed. He was veterinary surgeon to a firm of brewers in Liverpool who owned forty or fifty horses. Prior to his taking charge of the stud they had been very much troubled with colic. A mare, soon after he had taken charge of the stud, showed symptoms which led him to conclude that she had a calculus. He told one of her proprietors so. She had recurring illness and recovered after his treatment time after time, but ultimately succumbed after twenty-four hours pain. The client was rather sceptical, and asked that his foreman might be present at the post-mortem examination. He (Mr. Hurndall) consented. The result was the discovery of a calculus 7 or 8 lb. in weight. It was somewhat of a honeycomb shape with very large prominences, and they could readily understand that such a calculus very easily got fixed into a position whence it would be very difficult to remove. That case convinced him that without a surgical operation they could not hope for any good result unless the calculi were of such a size as to admit of passing on through the small colon. Mr. Butters was right, he thought, in recommending that other food should be substituted for bran. After the death of this mare, he suggested to the firm with whom bran was a ready article of diet, that they should not give their horses bran in such large quantities. They asked him to formulate a diet and he did so leaving bran entirely out of it. They reluctantly consented to adopt the diet he advised, but after it was adopted there was no other case of calculus in their stud during the five or six years he acted for them.

Professor PENBERTHY said he appeared not to have made himself plain and, therefore, he would try to explain his meaning better. He allowed that bran contained a large amount of material of which calculi were formed and that if that material was not present calculi would not be formed. His idea was that a part of the alimentary canal got in such a condition as to favour the deposition of phosphate which was insoluble in the contents of the intestine—he would not call the phosphate "basic," if that word was objectionable. He could not forget that every horse had bands on its colon, and that the great majority of horses in Great Britian ate bran in small quantities. He took into account the habit of swallowing materials that might form nuclei, and he believed the great factor was the altered condition of a part of the bowel and its contents in favouring the condition he had mentioned. Although probably 79 per cent of horses ate bran sufficiently to form calculi a very small proportion of these were thus affected; and bran alone he held could not produce the calculus unless the conditions were present which favoured it.

Mr. H. EDGAR said that personally he felt very much obliged to Mr. Butters for having introduced a subject that was interesting in more ways than one, because it seemed to him that they were still very far from being perfect either in the knowledge of the formation of these calculi or of the symptoms which they exhibited. Hence he thought that a discussion on such a subject must be of the utmost importance to all of them Mr. Butters had noticed three forms or classses of calculi, to which he (Mr. Edgar) would add another that recently came under his observation. It was simply a compressed mass of fæcal matter, and it seemed to him that it was quite possible that some of those oat-hair calculi might be formed in a similar way. The horse to which he referred was ill, he thought, two days. It was in very violent pain—fearful pain. He did not think there was the slightest hope of recovery. At last the animal passed a mass of fæcal matter nearly the stze of the smooth ball he saw on the table. It was as hard as it could possibly be, almost as hard as one of the oat-hair calculi which had been exhibited that evening. The horse was making rapid progress towards recovery, and he saw no reason why it should not recover when, on the following moaning, to his astonishment he found it was dead. In making a post-mortem he discovered another and a larger mass of fœcal matter which had formed a calculus almost within reach of one's arm, just at the end of the colon. One thing he was disappointed that Mr. Butters did not touch upon, and that was the length of time involved in the formation of these calculi. That seemed to him to be an important point. In the case of a horse of which he had experience where an enormous calculus was found after death, the animal never showed any symptoms whatever until the illness occurred which ended in its death within two or three days. The singularity of this case was that there was a sac of the bowel in which the enormons calculus had lodged, but from some cause or other—probably from the horse's rolling—it passed into bowel and blocked it. This horse belonged to a miller and was one of twenty, all of which were largely fed on bran. The animal in question was however the only horse, so far as Mr. Edgar knew, which had calculus. The miller continued to feed his horses with bran and had not had another case of the kind. He (Mr. Edgar) believed with Professor Penberthy that there must be some peculiarity of the system that favoured the formation of calculi. If bran were the sole cause of calculi they might naturally expect more than the very small percentage of such cases in horses largely fed with bran. The horse of the miller to which he referred was ten or twelve years old. The question was how long had the calculus been in it? was it absolutely certain that these stones were formed layer upon layer from the outside or was calculus an internal growth or enlargement taking place by itself. Were calculi produced entirely by deposit? He believed that they were, and that the growth was very rapid. In conclusion Mr. Edgar moved the adjournment of the discussion.

Professor MACQUEEN :—I shall be glad to second that, but not with the intention of speaking again. However, I hope to be present at the next meeting.

The motion having been adopted, a vote of thanks to the Chairman—moved by Professor PENBERTHY and seconded by Mr. HURNDALL—concluded the proceedings.

ROYAL VETERINARY COLLEGE.
VETERINARY MEDICAL ASSOCIATION.

A meeting of the above was held in the College on Wednesday, Feb. 14th, at 6.30 p.m. There were present Mr. G. W. Freer in the chair, and 61 members and visitors. Mr. Dowell related a very interesting case of tibial fracture without displacement. An essay on "The method of examining horses for soundness" was then read by Mr. Hoole. The essay was a most instructive one and fully embraced the subject, dealing also with the wording of certificates. A discussion ensued in which many of those present joined.

R. Over, Hon. Sec.

EXTRACTS AND NOTES.

ANTHRAX.

By Professor Axe.

[Abstract of paper read before the Farmers' Club, at Salisbury Square Hotel, on February 5th.]

It is now 20 years since I demonstrated for the first time, I believe, in this country, the contagious nature of anthrax. I then showed by a series of experiments * on rabbits, guinea pigs, and other creatures, what continental veterinarians had already affirmed, that the blood of animals dead of the disease invariably contained large numbers of a particular organism, which has since become known as the bacillus anthracis. That this organism was the cause of the disease I had then no doubt whatever, but it was left for Koch, the distinguished bacteriologist, by the adoption of improved methods of research, to afford absolute proof of its causative relations, which he accomplished in 1876.

The organism of anthrax belongs to the vegetable kingdom, and is now generally regarded as one of the class of lower fungi. It consists of an elongated mass enclosed in a thin transparent sheath or case. In shape it is like a small rod, as illustrated by the diagram before you, but the figure conveys no idea of its extreme minuteness. It is probably not more than 1-1800th to 1-2000th of an inch in diameter.

The anthrax bacillus possesses marvellous powers of reproduction, and it is impossible to conceive, much less to estimate, the vast numbers of these organisms which may come into existence in a few hours after once a few of them have gained access to the blood of a susceptible animal.

Its mode of reproduction depends upon the conditions under which it is placed. In the blood of the living animal it is effected as illustrated on the diagram by a process of vegetative multiplication, *i.e.*, the little rods after rapidly increasing in length divide into short segments, each of which, on being detached, forms a separate and independent organism. These as before undergo elongation and division, and this lengthening and dividing is repeated again and again, and continued until disorganisation of the blood and blocking of vessels results in death of the victim.

In this mode of propagation we recognise one of the simplest forms of reproduction, in which, however, none of the elements can be said to reach maturity. If the parasite be cultivated outside the body, whether in the laboratory of the bacteriologist or in the soil of our pastures, the highest stage of development is reached, provided the necessary conditions as to food, moisture, air, and temperature are supplied. Here the short rods continue to grow into long filaments, in the centre of which there soon appears a row of round or ovoid glistening particles as shown in the diagram. These are the spores or seeds of the fungus, which, in due course, escape from their spore case, as peas do from the pod, and, like the latter, form starting points for the growth of fresh plants. This difference in the behaviour of the anthrax organism under the conditions stated arises from the fact that seed formation can only take place in them when the bacilli have access to atmospheric air. So long as they are confined to the blood vessels, where air is not accessible, so long do they fail to form seeds or spores. But it must be remembered that although atmospheric air is necessary to seed formation by the bacilli, it is not necessary to the development of bacilli from the seeds. For it is found that when the latter are inoculated into a living animal they speedily develop into anthrax rods.

As we have already seen, the living body furnishes all the conditions of temperature, food, and moisture necessary for bacillary reproduction. When, however, death takes place, *provided the body is not opened or the hide cut*, the organisms then existing in the blood soon disappear. In from seven to nine days, or even earlier than that, they degenerate, die, and break up, as putrefaction proceeds, after which the blood loses its power of infection.

If, on the other hand, the carcase be opened and air is allowed access to the blood, then active spore formation commences in the bacilli, and continues so long as the necessary warmth remains in the flesh, and decomposition is delayed. Much the same may be said of the organisms contained in blood-stained discharges which fall from the sick, and in the blood which herdsmen and others frequently extract as a measure of treatment. These on falling to the ground find ample food supply, and a fertile soil in the organic solutions which abound on our damp pastures; and under the influence of summer heat soon proceed to spore formation, and contaminate the soil with seeds of the disease.

It is to these seeds of the disease that anthrax owes its stubborn resistance to measures of prevention and extermination. Unlike the rods from which they spring, they are possessed of a strong outer covering or shell, which enables them to resist extreme changes of temperature and other adverse conditions, and to remain dormant in the soil for long periods like the seeds of charlock. Drying and freezing do not destroy them, and after boiling for a period of several minutes they still retain their power of infection. To rid the soil of them is impossible, but it is quite practicable to largely diminish its further infection if farmers are willing to carry out the teachings of sanitary science.

The success of sanitary science in the subjection of animl plagues depends for the most part upon the vitality of the organisms out of which they arise, the *habitat* or environment under which they live, and the extent to which their importation from foreign sources can be controlled. We have already pointed out that the microbe of anthrax finds a *habitat* as congenial in the soil of our pastures as in the blood of our cattle, and there it lives unseen from year to year, and for many years, retaining the while all its virulence and power for evil, notwithstanding the extremes of cold and heat, of dryness and moisture to which it is exposed. While buried in the earth it gives out no signs of its whereabout, and cannot therefore be attacked, and it is only when an outbreak of the disease appears that its presence is made known. From a sanitary point of view this is a serious and unsurmountable difficulty. It is important, therefore, to recognise that the poison of this disease is most under our control when in the body of the dead and afflicted, but even here it cannot be claimed that we have hitherto made any serious attempt to destroy it inasmuch as we simply return it to the soil—its native element—multiplied many thousandfold in the dissected carcases of its victims.

Measures of Prevention.

The difficulty of stamping out anthrax is not alone a matter of the life history of the organism, but is largely dependent upon the freedom with which the virus of the disease is imported from abroad with animal products and remains, and the unrestricted use of refuse arising out of them for manurial purposes.

If, however, this disease cannot be stamped out, a great deal may be done to prevent its occurrence and to suppress it when it appears on a farm; and here let me say that much of the success for which we may hope in this direction would depend more upon the intelligent

* Royal Agricultural Society's Journal, 1873.

exercise of precautionary measures by stock owners themselves than upon statutory legislation. Although the latter is indispensable as a means of combating anthrax prevalence and effecting its speedy suppression, the operation of the orders hitherto made under the Contagious Diseases (Animals) Act do not appear to have caused any hopeful reduction in the number of outbreaks notified since they came into operation in 1886 and '92 respectively. According to the statistics of the Agricultural Department, gradual diminution took place between 1887 and 1890, when the number of outbreaks notified were:—In 1887, 214; in 1888, 158; in 1889, 145; and in 1890, 137. In 1891, however, the number rose to 200 as against 137 in the previous year, while in 1893 no less than 558 outbreaks are reported.

Slaughter of contact animals is quite in accord with sound principles of sanitation and economy when applied to cattle plague, foot-and-mouth disease, and pleuro-pneumonia, but it cannot be regarded otherwise than a waste of life and needless sacrifice of human food when applied to anthrax. In the three first-named diseases this course was dictated by considerations affecting the mode of spread, and the low vitality of the contagion out of which they respectively arose. Such considerations warranted the conclusion that all these affections could be "stamped out," or in other words that all the virus or germs out of which they arose were capable of being destroyed, and the country freed from infection. The end in these cases amply justify the means, but, for reasons which I have given in considering the life history of the anthrax microbe, there is no prospect or promise of such a result in respect to the disease in question. As already remarked, the power possessed by anthrax organisms to live and germinate outside the animal body is not given to those of cattle plague, foot-and-mouth disease, and pleuro-pneumonia. In each of these three affections the germs which leave the body of the sick sooner or later perish unless transferred to another suitable host. To slaughter, therefore, all cattle in a herd on the appearance of one or another of these diseases has the effect of starving the virus by removing the only soil in which it can live and grow. The mode by which infection enters the body must also be taken into account in deciding upon the necessity for destroying contact animals. In this connection a striking and important difference exists between what occurs in anthrax and the other disorders named. In the former the virus enters almost exclusively by the mouth along with food and water, while in the latter it is mainly received as infected air. The facility with which food and water can be controlled renders the suppression of anthrax comparatively easy, when, in addition the sick are promptly destroyed, and other sanitary observances presently to be noticed are strictly carried out.

Slaughter of the Sick.

Destruction of the sick is, nevertheless, a measure of the first importance, and its value as a means of suppression and prevention will be in direct proportion to the promptness with which it is carried out. Twenty years ago I pointed out the fact that until one or two hours before an anthrax-stricken animal dies no organisms can be found in the blood, this evidently being not on account of their absence, but in consequence of the small number which at that time are contained in it. If, however, the blood be examined immediately after death, immense numbers are found in every drop. It is perfectly clear, therefore, that it is during the last hour or two preceding death that the great bulk of the virus is formed, and to allow animals to reach this stage of the disease is to encourage the cultivation of the poison, and ultimately its accumulation in the soil. To destroy infected animals in the early period of the disease, then, is a procedure which all stock-owners should insist upon being carried out. As to what animals should be regarded with suspicion as distinguished from others actually affected I would say that when the existence of anthrax has been established in a herd, all animals having a temperature of 105° should be dealt with as infected animals and destroyed. Moreover, suspicion of anthrax should always attach to animals which die suddenly on a farm without obvious reason, and such cases should be dealt with as infected animals, until assurance to the contrary has been obtained from a qualified veterinary surgeon. Neglect of this precaution has led to immense losses, and many farms now permanently infected might have been kept free had it been observed.

Hitherto, killing anthrax animals has not been an unmixed good. Both the pole-axe and the knife cause an escape of blood and consequent contamination of soil or litter. To obviate this all anthrax animals should be destroyed by the injection of prussic acid directly into the lungs, or into one of the large veins. The operation, when properly performed, is a bloodless one, and if carried out early in the attack affords the best security against further scattering of the poison.

Vaccination.

Pasteur has shown that by growing the organisms of anthrax under certain special conditions outside the the body, their natural virulence may be toned down or altered until they are entirely deprived of their hurtful properties, and he has further demonstrated that if this virus be introduced into the body of healthy animals at certain stages of its cultivation, such animals become proof against the disease—they become what is termed protected; just as man is protected from small-pox by vaccination.

For what period anthrax vaccine affords security against subsequent infection I am not able to say, but certainly for nine months, and may be much longer.

It is much to be regretted that such a hopeful safeguard against anthrax should be restricted in its employment by fear of possible dangers arising out of its defective preparation.

In course of its use in France, Germany, and other countries, it has been found that in consequence of faulty preparation the vaccine material has sometimes retained its natural virulence, and caused the death of animals it should have protected. While on other occasions its protecting power has been cultivated out of it, with the result that animals inoculated with this over-attenuated virus have not been protected at all, but have fallen victims to the disease when pastured on infected soil. In consequence of these untoward results and the limited prevalence of the disease, no encouragement has been given to its employment in this country, but having regard to its increasing spread it seems to me that the time has arrived when the question of anthrax vaccination should be re-considered.

A glance at the incidence of anthrax in different parts of the country will show that the general adoption of vaccination against this disease is neither necessary nor desirable, but in certain districts or on certain farms some such protection is becoming indispensable if the breeding and rearing of live stock are to be continued.

Disposal of the Dead.

In this, more than any other contagious disease, does importance attach to the disposal of the dead as a measure of prevention. The fatality of the affliction, its increasing prevalence, and the extraordinary vitality of the virus, concur in rendering precaution in this connection of supreme importance. Up to the present time earth-burial has been universally adopted, notwithstanding that the dangers which belong to it have been fully recognised and the superior claims of burning repeatedly urged.

That prompt and complete destruction of the flesh, such as can only be done by burning, is the most effective way of disposing of infection hardly admits of doubt; but with this, as with some other matters relating to the prevention of anthrax, no attempt has been made to determine its practical usefulness. What appears to be required is either a portable incinerator in each anthrax district which could be transmitted to the seat of outbreak, or a fixed furnace to which the carcases may be carried in suitable vehicles.

Until a better system is devised, earth-burial must continue to suffice.

In carrying out this duty, selecting a suitable place is of the first importance. A copse or wood, or piece of waste land, or some other enclosure to which animals have not access, should be fixed upon, taking care that the grave is not dug near to river, stream or pond, or other source of water supply. Six feet deep is the prescribed depth of a grave, the bottom of which should be covered with six inches of lime. Before removing the carcase to the grave all the inlets and outlets of the body should be freely dusted over with disinfecting powder, and afterwards plugged with wisps of hay previously soaked in some antiseptic solution. The feet also, which almost invariably bear the poison, should be washed with the latter and afterwards thickly dressed with the former.

These precautions are directed to the prevention of escape of blood from the bleeding passages, and scattering of virus in the course of transit. Drawing the carcase to the grave by means of ropes over pasture land, as sometimes adopted, is a reprehensible practice. Where it is practicable a cart should be employed for its conveyance, or a board or some other means of keeping it from contact wiih the ground should be extemporised.

To Prevent Extension of the Disease.

It has been frequently pointed out that the sudden death of an animal without obvious reason is usually the first noticeable event in an outbreak of this disease. All such cases, especially when occuring in cattle, should be regarded as anthrax until proved to the contrary. It frequently happens that the disease commences and terminates in a single case, but the stock owner whose only acquaintance with it is gathered from reports of alarming and extreme outbreaks in the public press relies for his diagnosis on the wholesale destruction with which he has been made familiar. Precautionary measures are consequently disregarded, the soil and litter become infected, with the natural result that a recurrence of the outbreak sooner or later takes place. Such sporadic cases are usually the starting points of that permanent infection which declares itself on so many of our farms to-day.

To prevent extension of the disease implies the interception of the poison, and if it be true, as we believe, that with few exceptions the poison goes in at the mouth, then contamination of food or water is the natural inference to be drawn with respect to the source of infection. That being so, the apparently healthy stock should be removed fram the obviously diseased, and the food and water then in use should be at once discontinued, and supplies drawn from fresh sources, unless any part of the former or the latter as a whole can by the circumstances of the case be eliminated from suspician.

Six days at the least should be allowed to elapse after the last case of disease before the herd are allowed to leave the shed or yard, and the same course of disinfection of the feet already prescribed should be repeated before they enter a fresh pasture. Traffic between the quarantine animals and the adjoining premises should be restricted to one man, who should cleanse and disinfect his boots whenever he leaves the enclosure. Neighbours and friends should be forbidden to enter the premises, and poultry should be kept in confinement until the outbreak has been snppressed. On removing the cattle all litter must be burnt, and the ground surface should be freely sprinkled with some efficient disinfectant, and the mangers, troughs, fittings and utensils should undergo thorough cleansing and disinfection.

It is common practice with shepherds and herdsmen to bleed sheep and cattle when fatally attacked with illness, and for stockowners to dispose of the carcases of such animals for human food. It need hardly be said that this is a most dangerous procedure. Contamination of the soil or litter, maybe the drains, one or all, must take place, and should the disease happen to be anthrax, as is frequently the case, not only is the life of the man who dresses the carcase placed in danger, but also those who subsequently handle the flesh. There is, therefore, attached to these cases a terrible responsibility which cannot be too widely known.

Hay, straw, and roots, indeed all descriptions of fodder, are liable to become contaminated with anthrax virus when grown on infected soil, hence it is that outbreaks of the disease so often appear in our yards and sheds. Where large quantities of manure become infected from the discharges of the sick the farmer is placed in a most trying position, for he is bound to accept one of two alternatives, both of which involve loss to a greater or less extent. He must either destroy his manure and starve his crops, or he must risk the consequences of its application to the soil. Sanitary science and economical considerations prescribe the former, and much as expediency may urge him to adopt the latter he will do well to follow the dictates of reason as the only way out of his difficulty. He will be sure to ask if nothing can be done to render the manure safe, and we are bound to admit we have no reliable advice to offer him. The conventional lime and salt of course suggest themselves, but allowing them to possess germicidal properties, without complete incorporation the subtle germs might still assert themselves, and nothing could compensate the farmer and landowner for the mischief which would accrue from sowing broadcast the seeds of anthrax.

Can anything be done to free our pastures from infection? is an oft-repeated and important question, but in the present state of our knowledge it only admits of a negative answer.

For many years we were in the habit of suggesting the experimental use of liberal dressings of lime and salt, but in the majority of instances the disease returned again with all its former virulence, and in those in which it did not do so there was no reason to attribute its absence to the effect of the dressings. Breaking up the land and a course of tillage have been resorted to again and again, but without diminishing the virulence of the soil, and at present we have nothing to suggest as likely to yield more favourable results.

If, however, we cannot assail and subdue the parasite in its stronghold, we may do much to guard our pastures from further infection. It is impossible to look at the unequal distribution and prevalence of the disease over the country—its great incidence in one county or part of a county and its almost entire absence from another, without being impressed with a conviction of the existence in the one of some special favouring conditions which are altogether wanting or but feebly operative in the other. Why, for instance, should Northampton, with its 897,762 acres of arable and pasture land and a cattle population of 134,973, have 70 outbreaks in five years, while Cheshire, with a greater breadth of land and a greater number of cattle, should only have four? Why, again, should the West Riding of Yorkshire have 134 outbreaks during the same period with 1,206,634 acres and 823,477 head of cattle, while the

East and North Ridings, together with an acreage of 1,533,696 and a cattle population of 708,513, have only one-twelfth the number? Further, why should Dorset, with only one-third more cattle than Cambridge, have 37 times more outbreaks? and lastly, why should the greater incidence of this disease fall on counties and parts of counties in which animal products and animal remains form a prominent feature of their manufacturing industries? Surely there are reasons for these discrepancies, and underlying them possibly the key to measures of prevention may be found. It seems from what has been said that some inquiry into the relation of anthrax to certain branches of industry is imperatively called for, not only in the interest of the stockowner, but also in regard to public health, and in view of the recent serious extension of the disease among farm animals such inquiry should not be delayed. The connection of anthrax poison with foreign wool, hides, bones, hair, horns, and hoofs, has been amply established, and any inquiry which may be set on foot should be extended to all departments of manufacture in which they are employed, and especially the manufacture of manure out of the refuse derived from them.

The FitzWygram Prizes.

We have great pleasure in publishing the following announcement

"Lieut.-General Sir F. FitzWygram offers three prizes, £50, £30, and £20, to be competed for by students, who have gained the Diploma R.C.V.S. since the Spring examination, 1893. The conditions will be much the same as last year."

F. W. FitzWygram.

A VETERINARY SURGEON CHARGED WITH "CRUELTY."

At Newport Borough Police-court on Monday (before Mr. H. J. Davis and other magistrates) Charles Bennett, labourer, Thomas Francis, contracter, and Edwin Sayer, veterinary surgeon, were summoned for cruelly ill-treating and causing to be ill-treated a horse. Mr. Frank Lewis defended.—Inspector Warr, of the Royal Society for the Prevention of Cruelty to Animals, who prosecuted, said in Alma-street on February 10 he saw a mare drawing a scavenger's cart. The animal, which was in charge of the man Bennett, was very lame, especially in the fore legs, and upon examination it was found that the joints of the fore legs were diseased and had bone enlargement. It was suffering from ring-bone and side-bone, and he considered that it was cruelty to work it. Francis afterwards told him that he worked the mare under the orders of Mr. Sayer. Subsequently witness saw Mr. Sayer, who admitted that the mare had ring-bone, but not side-bone, and denied that it suffered any pain.—Other evidence having been called in defence, Mr. Lewis contended that Mr. Sayer was not liable even if he did advise that the mare should be worked, but the Magistrates ruled otherwise.—Mr. Job Francis, the owner of the horse, and father of one of the defendants, said Mr. Sayer had not given any professional advice with regard to the mare for two years. Inspector Lockwood gave him permission to work the horse two years ago, and the lameness had not changed since then.—Mr. James Dow, veterinary surgeon, Swansea, who examined the mare on Sunday, said it was perfectly fit to work, and had suffered no pain.—Mr. A. C. Stewart, veterinary surgeon, Cardiff, said the mare was mechanically lame, but suffered no pain,—The Bench fined Bennett he being merely a servant, 5s.; and Francis and Sayer 20s. each.—Mr. Lewis gave notice of appeal, but it was pointed out by the Clerk that the fine was under 40s., and that he could not appeal.—Mr. Lewis: I hope you will increase the fine, to entitle me to appeal.—Mr. Davis: The bench have already come to a decision.

MAGISTRATES AND TECHNICAL KNOWLEDGE.

At Worship-street, last week Mr. Bushby had before him a series of summonses taken out by the vestry of Shoreditch, against the owner of some houses in that district, the chief question before the magistrate being whether the houses were properly protected from damp. Mr. Bushby referred to the difficulty with which magistrates often had to contend in deciding such matters, and suggested the name of an architect who should be asked, at the expense of the contending parties, to give a decision in the matter. This suggestion was accepted. Mr. Bushby has undoubtedly taken a wise course in this matter. Subjects are continually being submitted to magistrates which require technical knowledge, and it is unfair to expect them to apply to these cases more than the ordinary good sense which usually characterises their judgements. Both the Housing of the Working Classes Act and the Public Health Acts often impose upon the magistrate the extremely difficult duty of deciding the effects upon health of certain structural conditions—questions which not only require medical training, but prolonged and careful study and experience. This is unfair both to the magistrate and to the public. It is, moreover, unnecessary that this condition should continue, for the knowledge which is needed is available, and all that is required is the acceptance of the principle of referring cases which is already recognised in the legal procedure of the country. It is much to the credit of the London magistracy that one of their number should have recognised the need of technical assistance in magisterial decisions, and we hope it will not be long before it is more largely available.—*Lancet*.

CORRESPONDENCE

SCROTAL HERNIA.

Sir,

D. Y. D. relates in your issue of the 17th inst a fatal case of scrotal hernia. He invites some remarks on the case to which I have much pleasure in responding.

I would recommend him in all bowel affections to make an examination per rectum, for in the majority of cases this will assist him in his diagnosis: had he done so in this case he would probably have found the cause and afforded his patient relief. In all the cases of this nature that I have seen, the horse will endeavour to lie on his back and abduct the hind extremities from the body, remaining in this position for some considerable time; when on his feet, will stand out, and throw up the head repeatedly as high as he can get it showing plainly he is desirous of withdrawing the strangulated gut. Hot flannels thrown on the scrotum, and by resorting to the taxis operation, success may almost be guaranteed, altho' in one case I found the intestine adherent to the walls of the inguinal canal, I afforded him relief in 3 or 4 instances, but at last the ingesta become impacted in the inguinal canal with fatal results. In the early stages the painful symptoms are very acute, but as the congestion consequent on the strangulation increases the acute symptoms pass off, and the animal shews a wandering disposition and a wretchedly anxious countenance, and other symptoms described by your correspondent.

In my opinion the primary and actual cause of death was strangulation and inflammation of the intestine; the tympany a result of the strangulation and fixture of

the gut; the rupture of the stomach due to violence on the part of the animal in his agony while the organ was distended with gas; and the vomition an indication that rupture of its coats had taken place, which accelerated the fatal termination.

I may add, that it is always better to study the symptoms and so endeavour to fathom the true nature of the case rather than risk being misled by the opinion of the owner or attendant; and as in this case where one's suspicions would be aroused, make a searching examination to satisfy oneself positively respecting it, or to find some other cause for the mischief. An examination per rectum will invariably demonstrate whether an obstruction exists in the small or large intestine, also if there be strangulation by twist or otherwise.—Yours faithfully,

Battle. H. JARVIS, M.R.C.V.S.

A VETERINARY SURGEON CHARGED WITH "CRUELTY."

SIR,

I enclose you a short report of a case tried here yesterday before a bench of five magistrates, in which I unfortunately appeared. The facts of the case are these.

The mare in question is a 7 year old shire cart mare in foal, she was purchased by her present owner Mr. Job Francis, Corporation Contractor; four years ago, and was then suffering from ringbone, but going very slightly lame; nearly two years ago she got much lamer, and owing to a R.S.P.C.A. inspector drawing his attention to the fact he called me in to see her and to give him my opinion. As he had a farm, I advised him to send her there for a time, which he did. She now had very large ringbones (lateral) on each coronet in which the lateral cartilages were involved. After being at the farm for a short time he again brought her in to work. Although still lame the inspector said she was fit for steady work and did not seem to suffer any pain; this was also my opinion, I did nothing in the shape of treatment except to order broad flat shoes in which she travelled very well. From then, until the 10th inst., she has been regularly working in a scavengers' cart, on good level roads in the borough. On the 10th Inspector Warr, R.S.P.C.A., met her, ordered the driver to take her out of the cart and take her home. While on the road to the stables the owner's son met the man and the mare, and on being acquainted with the fact told the man to call at my house (on the way to the stables) and let me see the mare. I examined her and found the growths in about the same state as when I previously examined her nearly two years ago, but not so lame. In the evening the inspector called on me and asked me if I had seen the mare. I said yes, and that I considered her quite fit to do the work she was doing. On the 16th, about 8 p.m., I was served with a summons for "cruelly ill-treating and causing to be ill-treated" a horse on the 10th instant. On the 11th I wired for J. Dow, M.R.C.V.S., of Swansea, and A. C. Stewart, M.R.C.V.S., of Cardiff to come and see the mare, which they did, and both gave their opinion that the mare was quite fit for work, that the lameness was not due to pain, but mechanical. We injected a 20 per cent. solution of hydrochlorate of cocaine, well in, around growths, but this did not alter lameness in the least, and you can manipulate the part without getting any pain evinced.

The case was tried yesterday, the 18th, and the inspector got into the witness-box and said "he had had 30 years of experience in the Army etc., had passed an examination in London, and saw more cases of lame horses in a day than I did in a month, etc. etc. In his opinion the mare was lame from ringbones and sidebones. There was heat, inflammation, and great pain present. That lameness was the language of pain etc." He was supported by a P.C. to whom he showed the mare, and Wm. Sheaf, M.R.C.V.S. Having employed a solicitor I could not say a word. J. Dow, V.S., and A. C. Stewart, V.S., and the owner of mare were called by me. You see the result. Can you suggest any means of upsetting such an unjust and foolish verdict?—Yours sincerely,

EDWIN SAYER.

THE BOARD OF AGRICULTURE.

Sir,

Seven weeks have now elapsed since Prof. Brown resigned his position at the Board of Agriculture, and so far as I am aware his successor has not been named. This laxity on the part of Mr. Gardner is difficult to understand. Can it be that he has no intention of appointing a Veterinary Surgeon to the vacant position, and hesitates, in consequence of the feeling which would be aroused, to appoint a gentleman without professional training. As yet it seems to me the Veterinary Profession has not grasped the detriment which must inevitably ensue, should the latter course be adopted. I suggested in my last letter that perhaps something might be done to influence the President, but such is the apathy of our body that no one else has interested himself in the matter.

Meanwhile the Board of Agriculture remains without a Veterinary head, the officers engaged there have the entire professional work of the department on their shoulders, for which they receive no extra remuneration. I fail to see why this irregularity should continue, and I think it is imperative that some definite status should be given to those Veterinary Surgeons who are engaged in the important work of stamping out Animal contagious maladies.

In view of the depressed condition of agricultnre, and having regard to the importance of stamping out swine fever, the President cannot be permitted to weaken the Veterinary Staff of the Board, indeed it is generally admitted, such has been the benefit of veterinary aid, that additional professional help is even needed.

I desire, now, in dealing with the matter, also to draw attention to the most unsatisfactory position of several of the port inspectors, owing to the diminished importation of live animals several inspectors have lost positions which they had held for years. The Board desiring to retain their services, however, offered them the liberal fee of One Guinea per day, which I believe they are now paid. The strange part of it is that inspectors engaged in carrying out the Swine Fever regulations receive Two Guineas a day. Is the work of the port Inspector less important? No one will for a moment argue that it is. It is to be hoped that the Veterinarians attached to the Board will speedily be elevated to their deserved positions, and that they will at the earliest opportunity seek to procure a satisfactory position for the port inspectors.—Yours, &c.,

EQUITAS.

IRISH VETERINARY COLLEGE.

Just as we are going to press the information arrives that the Chief Secretary has promised £15,000 towards the endowment of a veterinary school at Dublin.

Several communications are unavoidably held over. The V.M.S. List of Officers will appear next week.

COMMUNICATIONS, BOOKS, AND PAPERS RECEIVED:—Miss E. A. Ormerod, Messrs. H. Jarvis, A. W. Wood, E. Sayer, D. Young, J. Owen, T. C. Toope, E. Beddard, H. J. Dawes, T. Simcocks, A. W. Hill, "Equitas," "The Farriers' Journal," "Dumfries and Galloway Courier," "Report on Injurious Insects."